California State Wildlife Action Plan 2015 Revision & Climate Change

CCTAG Meeting
December 6, 2013

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California Department of Fish and Wildlife

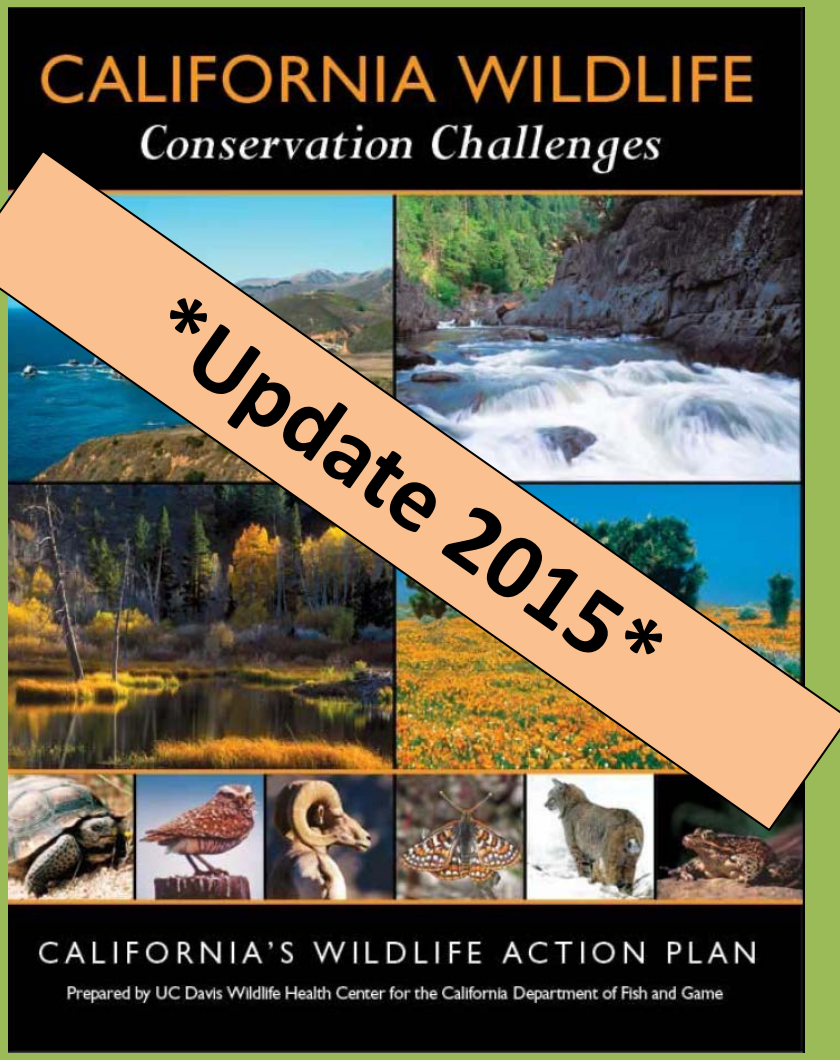
Outline

- SWAP Background
- Revision Process
- Climate change integration
- Discussion

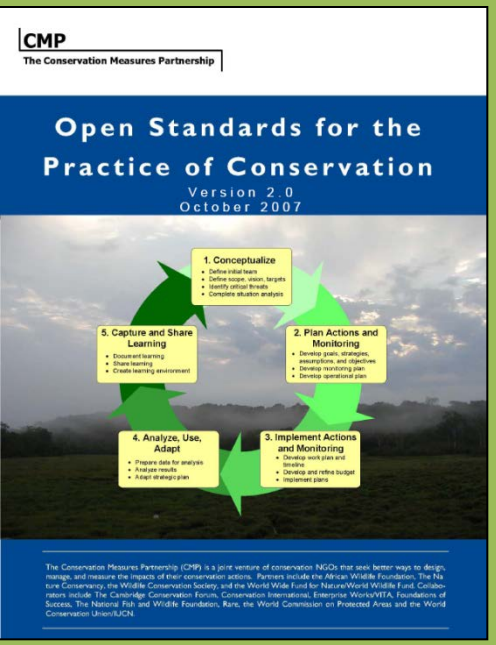
Background

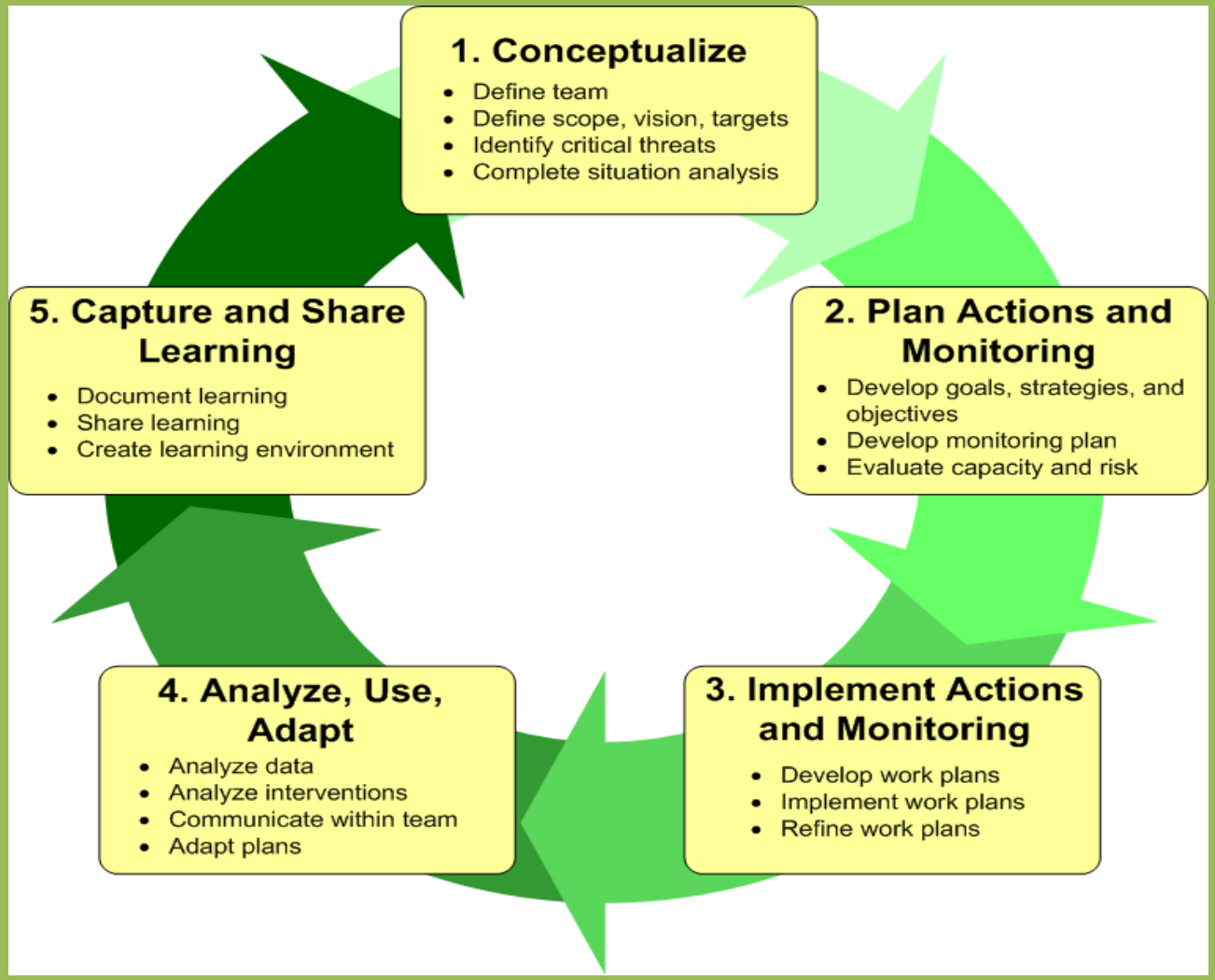
- Completed in 2005, 10 year update

- Objectives:
  - Create a collective vision
  - Conservation actions consistent with other agencies
  - Update species at risk, vulnerable spp, & SGCN
  - Incorporate cc impacts & adaptation strategies



Revision Process: Open Standards





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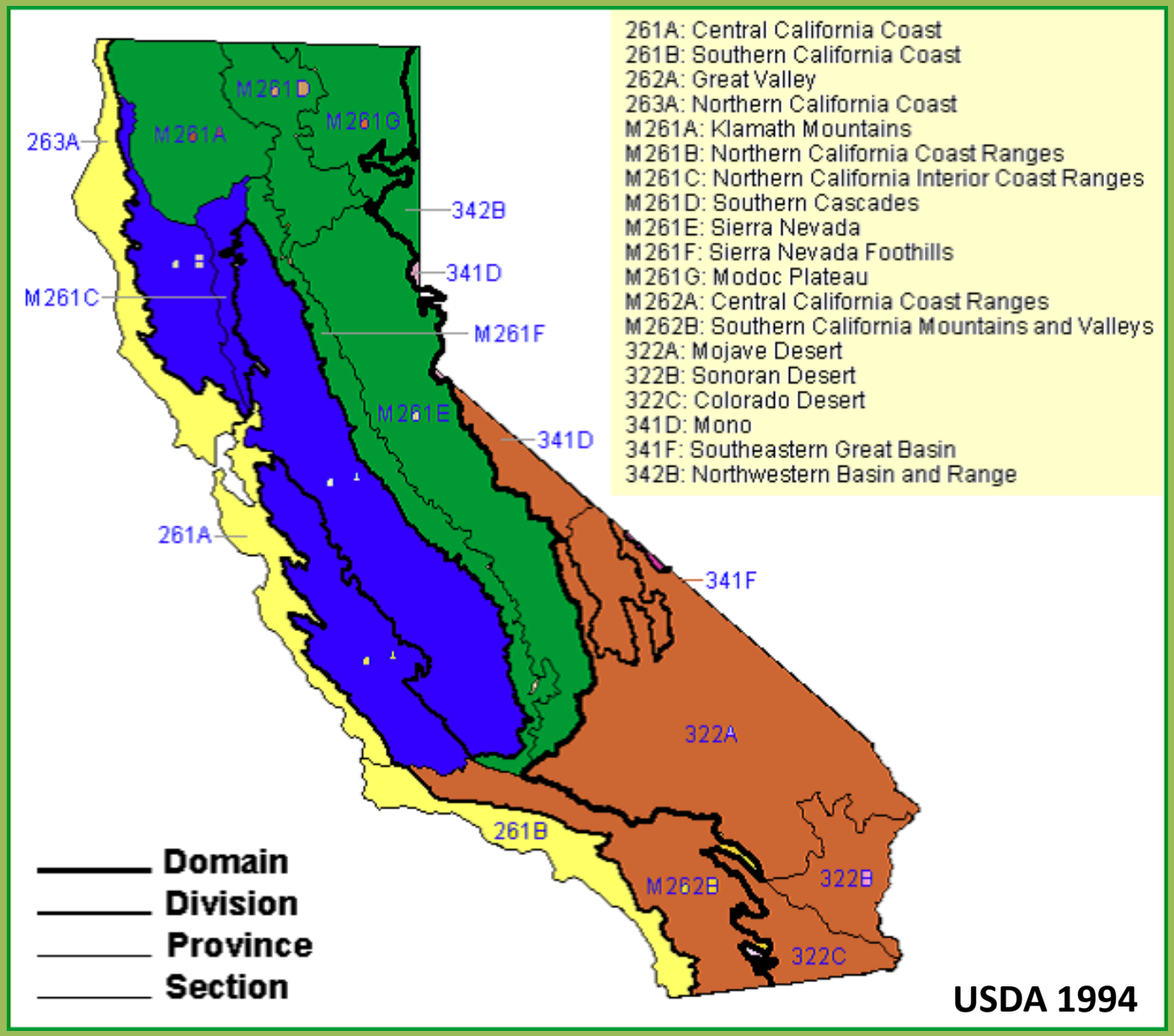
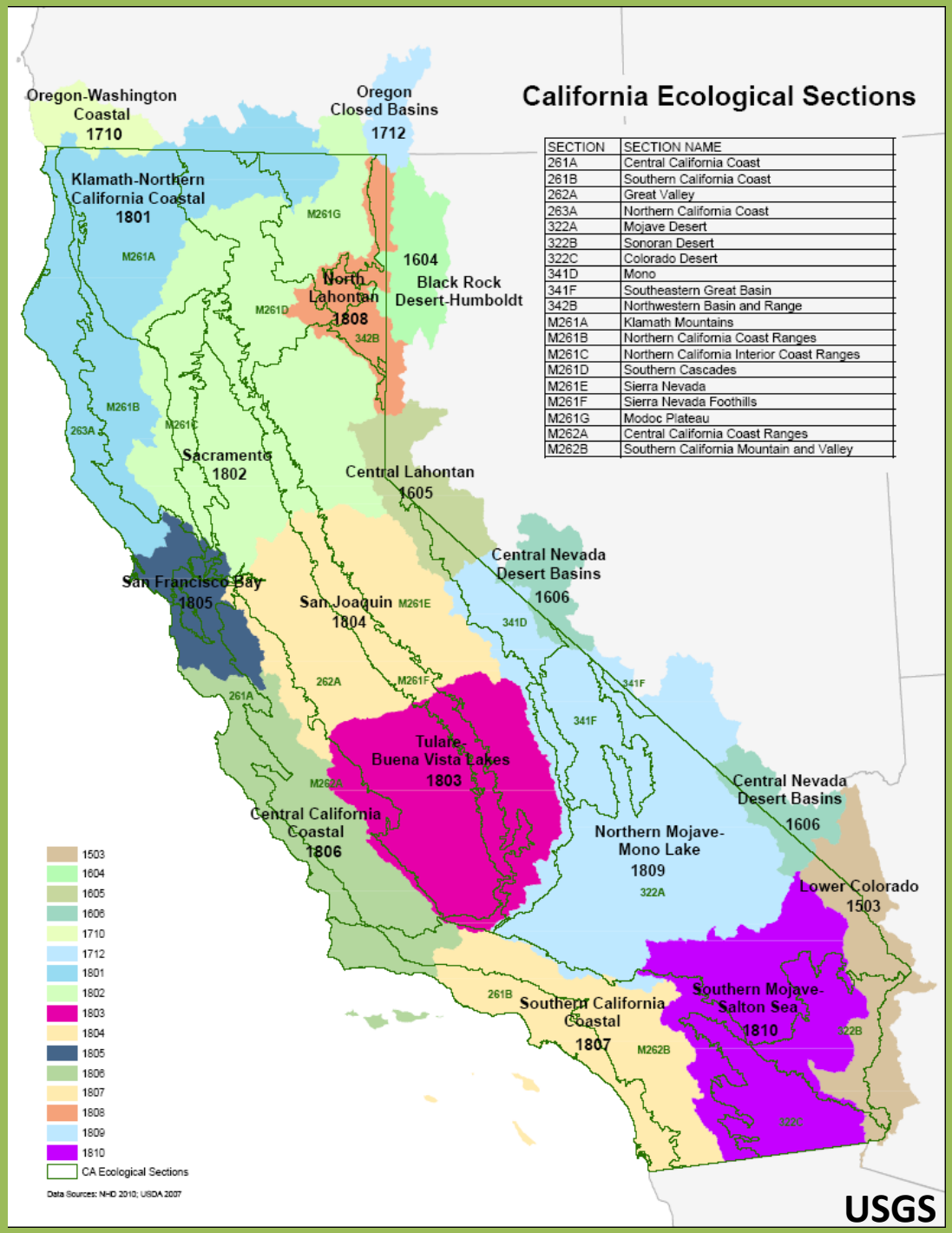
Planning Units

19 ecoregions



Planning Units

16 hydrologic units



SECTION	SECTION NAME
261A	Central California Coast
261B	Southern California Coast
262A	Great Valley
263A	Northern California Coast
322A	Mojave Desert
322B	Sonoran Desert
322C	Colorado Desert
341D	Mono
341F	Southeastern Great Basin
342B	Northwestern Basin and Range
M261A	Klamath Mountains
M261B	Northern California Coast Ranges
M261C	Northern California Interior Coast Ranges
M261D	Southern Cascades
M261E	Sierra Nevada
M261F	Sierra Nevada Foothills
M261G	Modoc Plateau
M262A	Central California Coast Ranges
M262B	Southern California Mountain and Valley

Planning Units

5 marine protection study regions

Revision Process: Target selection

Targets selected for…

- Marine: MLPA Marine Study Regions (5)
- Aquatic: HUC 4 level (16 Watersheds)
- Terrestrial: Ecoregions (19)

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- Terrestrial: Ecoregions (19)
  - Macrogroups

Macrogroups

- Ecoregion → National Vegetation Classification System → Manual of California Vegetation (contains hierarchy of vegetative associations) → Macrogroups

- Macrogroups are specific vegetative assemblages that make up habitats, or ecological systems that represent and encompass the full suite of biodiversity within the planning area

- Ex. California Forest and Woodland macrogroup in the Sierra Nevada Foothill Ecoregion

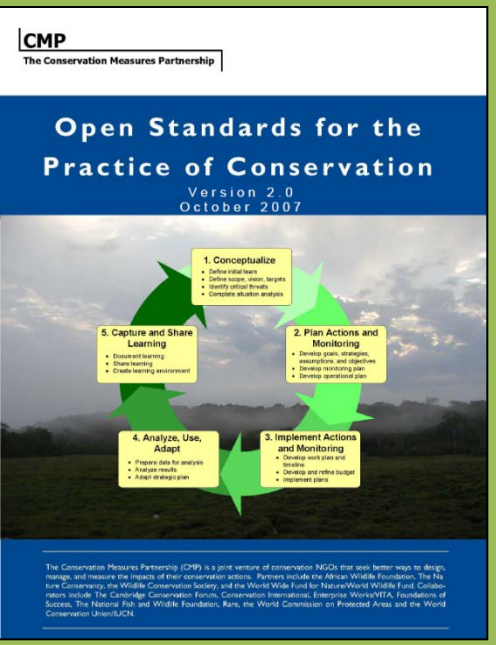
Target examples

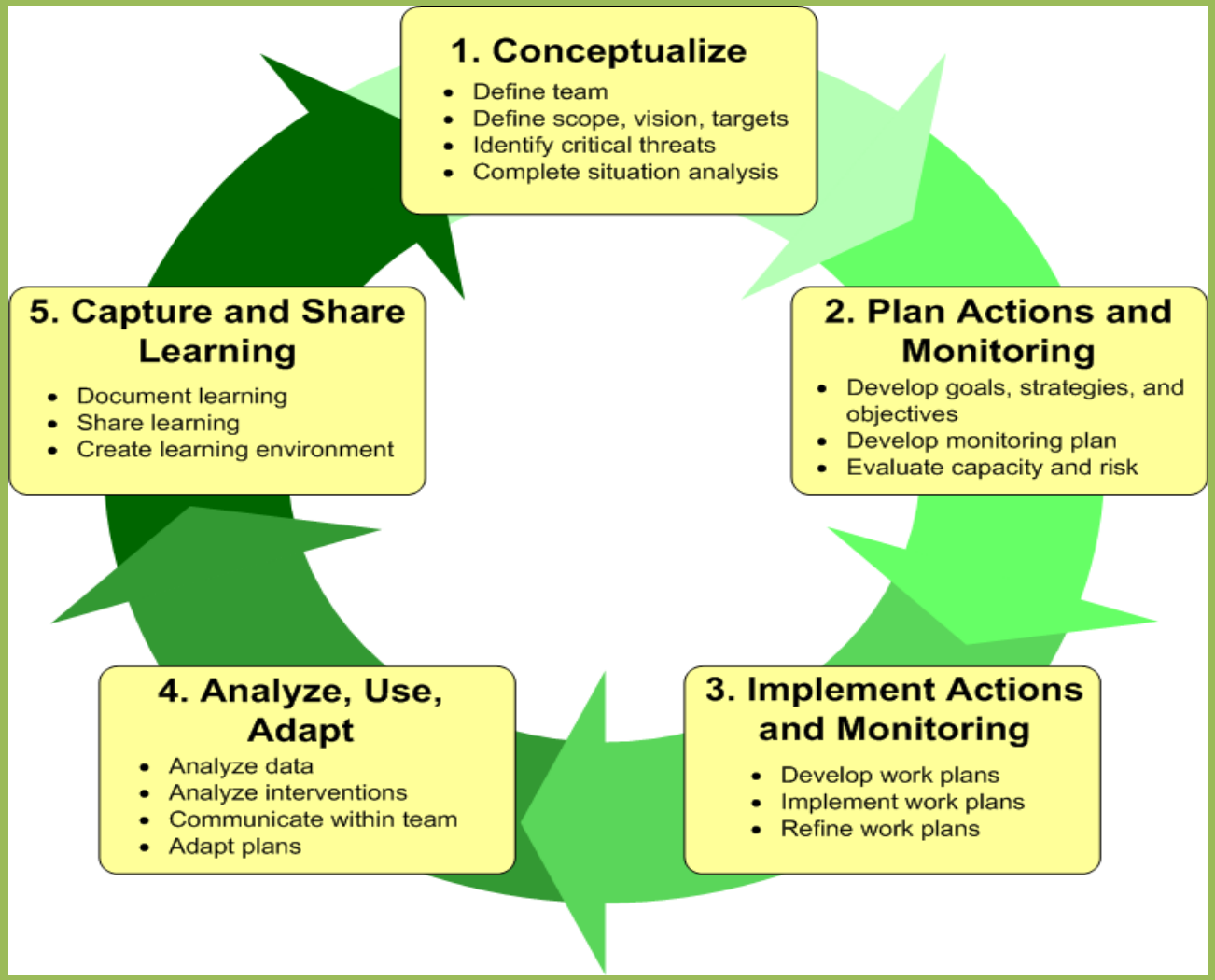
UNIT: ECOREGION/WATERHSED/MARINE STUDY REGION	LEAD-PERSON(S)	REGION WITH > OVERLAP 1°	2°	3°	Target 1	Target 2	Target 3
Klamath Mountains	B. Schaefer, J. Croteau	1			Wet Meadow/aspen	Early seral conditions herbaceous/shrub,montane HW	forest, rainforest, high montane forest Mature forest-montane-
Northern California Coast Ranges	G. Leppig, Dave Imper, Eric Nelson, Richard Lis, Christin Hubbard, Ali Aghili	1	3		Freshwater Wetland Aquatic Vegetation	Riparian Vegetation	Grassland
Northern California Coast	G. Leppig, Dave Imper, Eric Nelson, Richard Lis, Christin Hubbard, Ali Aghili	1	3		Freshwater Wetland Aquatic Vegetation	Riparian Vegetation	Mesic Coastal and Montane Forest
Klamath-Northern California Coastal-1801	M. Wheetly	1	3		Lost River (HUC 8) Fish Assemblage??Divine		
Oregon-Washington Coastal-1710	M. Wheetly	1			Lost River (HUC 8) Fish Assemblage??Divine		
Modoc Plateau	R. Shinn, B. Henderson	1			Sagebrush Steppe	Riparian/wetland	Eastside Ponderosa Pine woodland forest
Northwestern Basin and Range	R. Shinn, B. Henderson	1	2		Sagebrush Steppe	Riparian/wetland	Eastside Ponderosa Pine woodland forest
Southern Cascades	A. Aghili, Pete Figura	1			Western North American Montane/Boreal Peatland	Western North American Temperate Grassland and Meadow	Western Cordilleran montane-boreal wet meadow
North Lahontan-1808	P. Divine	1	2		Eagle Lake (HUC 8) Fish assemblage		
Oregon Closed Basins-1712	P. Divine	1			Warner Lake (HUC 8) Fish Assemblage		
Black Rock Desert-Humboldt-1604	P. Divine	1			NONE, very small portion of Nevada watersheds		
Northern California Interior Coast Ranges	J. Bush, A. Calderaro, Guisti	1	2		Blue-oak Foothill Pine	Perrennial Grassland	Valley Foothill Riparian
Sacramento-1802	Steve Baumgartner	1	2		Goose Lake/Upper Pit River Fish Assemblage. Divine		

The Climate Piece of the Puzzle

- How is climate change being incorporated into the SWAP revision process?
  1. Directly into Open Standards
  2. Statewide Conservation Issues chapter: Climate Change Section
  3. Statewide climate vulnerability assessment at the terrestrial target level

1. Climate in Open Standards





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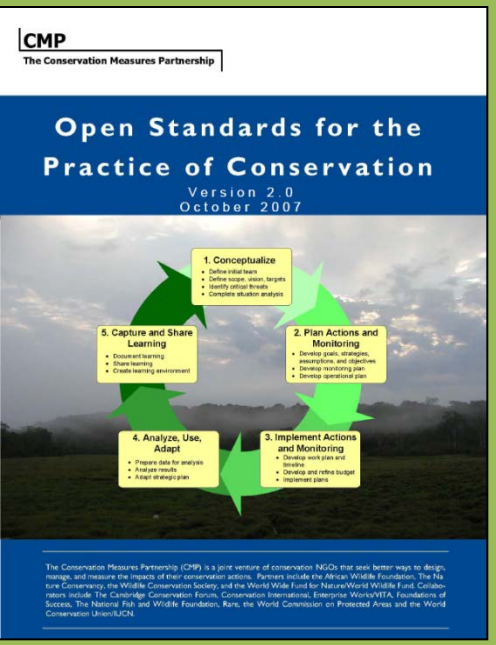

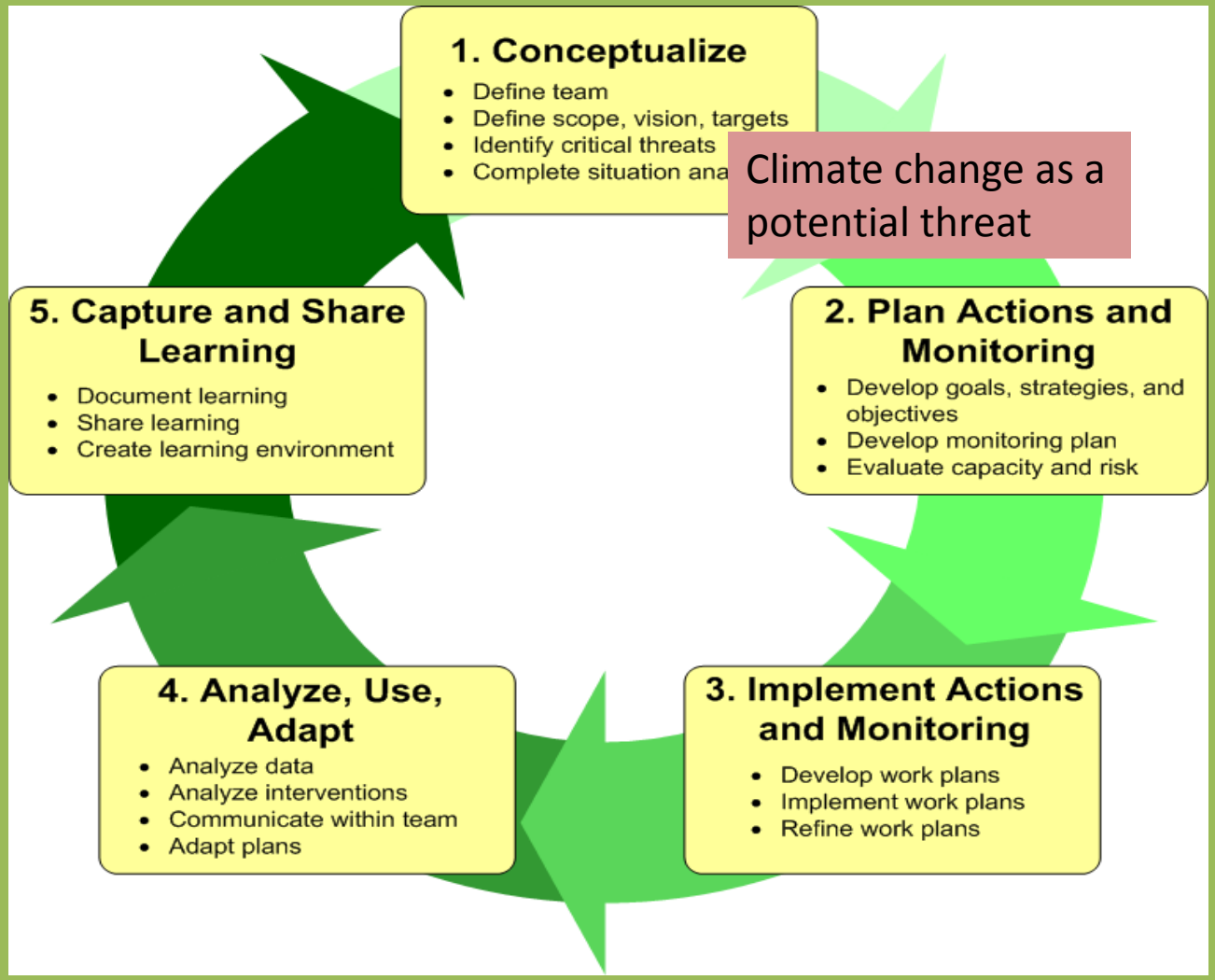

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1. Climate in Open Standards

- Process is conceptualized using Miradi Software

- Diagram and associated narrative/details

1. Next Steps

- Miradi file QA/QC
- Develop guidance for QA/QC process to ensure strategies and actions adequately and appropriately address climate change
- Ideas for broad/high-level guidelines?

2. State-wide Conservation Issues: Climate Change

- Purpose: Present state-wide strategies that reflect ecoregional issues
- Potential topics
  - Overview of state of the science
  - Overview of impacts to species and habitats
  - Adaptation opportunities
  - Mitigation opportunities
  - Cross-sector issues
  - Progress to date
- Ensure consistency with other plans (avoid redundancy)

2. Next Steps

- Develop chapter outline
  - Convene a climate stakeholder work group in January/February
- Ideas for content?

3. Statewide Vulnerability Assessment

- Assess exposure, sensitivity, and adaptive capacity of 42 macrogroups by region in California
- Develop stand-alone report and appendix for SWAP document
- Develop guidance for use in other management/planning efforts

3. Next Steps

- Project carried out in early 2014-2015
- Incorporate into SWAP report

Questions/Discussion

Discussion

- Guidelines for ensuring climate is adequately addressed in conservation strategies
  - Checklist? Criteria?
  - Adaptation basics?
  - How to avoid maladaptation?
  - Identify red flags?

- State-wide strategies for climate change chapter
  - Existing strategies to build from?
  - Synergies with other sectors?
  - How to avoid redundancy?

Thank you!

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SWAP revision website: www.dfg.ca.gov/swap/